

REMARKS

Favorable reconsideration of the application is respectfully requested in light of the amendments and remarks herein.

Upon entry of this amendment, claims 1-17 will be pending. By this amendment, claims 1 and 4 have been amended. No new matter has been added.

§112 Rejection of Claims 1-17

In Page 2 of the Office Action, claims 1-17 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. This rejection is respectfully traversed.

The Office Action indicates that, in claims 1 and 4, the newly amended limitation “wherein the first index information includes representative information indicating scene changes in the information data provided through the first information source” was not disclosed in the Specification. Applicant respectfully disagrees.

The Specification describes that “the video signal processing section 6 detects a scene change by comparing sequential frames with each other, and outputs the image from which a scene is changed to another (this image will be hereinafter called an index image), as a still image, to the video disk recorder during recording. In this manner, the video signal processing section 6 records an index image of each of scenes constituting a program, onto the video disk recorder 8.” *Specification, page 8, lines 10-15 (emphasis added)*. Thus, this paragraph indicates that, in one embodiment, the first index information includes “representative information indicating scene change in the information data provided through the first information source”,

where the representative information indicating scene change includes “the image from which a scene is changed to another, as a still image”.

The Office Action also indicates that, in claims 1 and 4, the newly amended limitation “wherein the second index information includes representative information indicating scene changes in the information data provided through the second information source” was not disclosed in the Specification. Claims 1 and 4 have been amended to delete the limitation.

The Office Action further indicates that, in claims 9 and 13, the newly added limitation “wherein the first index information includes a plurality of still images indicating scene changes” was not disclosed in the Specification. Applicant respectfully disagrees.

The Specification describes that “[i]n this set-top box 1, a tuner 2 receives broadcasting waves of digital satellite broadcasting which is down-converted through an antenna 3, and demodulates a desired transport stream from these broadcasting waves. Further, the tuner 2 demodulates image data and sound data from the transport stream and outputs the data together with an electronic program guide (EPG). ... A program information extraction section 5 extracts electronic program information from the output data from the tuner 2, and outputs the information to the internal control section 4, as well as the image data and sound data to a video signal processing section 6 and a sound signal processing section 7, respectively.” Thus, it is clear that information input to the video signal processing section includes a sequence of image data such as video data. *Specification, page 7, lines 13-21 (emphasis added).*

The Specification further describes that “the video signal processing section 6 detects a scene change by comparing sequential frames with each other, and outputs the image from which a scene is changed to another (this image will be hereinafter called an index image), as a still image, to the video disk recorder during recording.” *Specification, page 8, lines 10-13 (emphasis*

added). Thus, the paragraphs indicate that, in one embodiment, the first index information includes representative information indicating scene change as a series/plurality of still images. Although the paragraph on page 8 indicates “a still image”, when this paragraph (on page 8) is read in the context of the above disclosed paragraph on page 7, it is clear that the video signal processing section will receive image data and sound data from the transport stream to produce a series/plurality of still images.

Accordingly, it is submitted that the Examiner’s rejection of claims 1-17 based upon 35 U.S.C. §112 has been overcome by the present remarks and withdrawal thereof is respectfully requested.

§102 Rejection of Claims 1-8, 9 and 13

In Section 1 of the Office Action, claims 1-8, 9 and 13 stand rejected under 35 U.S.C. §102(b) as being anticipated by Florin *et al.* (U.S. Patent No. 5,583,560; hereinafter referred to as “Florin”). This rejection is respectfully traversed.

In the Background section of the Specification, it was indicated, “[c]onventionally, in a set-top box and the like ..., contents ... are displayed, for example, on a multi-screen in order that a desired channel can be selected easily from a large number of channels. ... it is also considered that a desired program is watched and heard by time shift. If a user watches and hears the program thus recorded, there may be a case that the user desires to watch and hear only a specific scene. In this case, it is considered that the scene desired by the user can be selectively provided if a head of each scene is displayed as a still image and a corresponding scene is reproduced by selection made by the user. Accordingly, the operability can be improved. However, if those still images are displayed and disposed simply, the before-after relationship of the still images

cannot be grasped easily, so the operability is deteriorated inversely.” *Background of the Specification, page 1, line 15 through page 2, line 9.*

To address the above-described shortcomings of the conventional information providing apparatuses and methods, embodiments of the present invention provides “a video signal processing apparatus and a video signal processing method by which a large number of images, which are consecutive in time series can be displayed such that a before-after relationship between the images can be easily understood.” *Specification, page 2, lines 13-16.*

For example, the structure of information providing apparatus claim 1, as presented herein, includes:

“means for obtaining first index information from a first information source of the plurality of information sources, wherein the first index information includes representative information indicating scene changes in the information data provided through the first information source;

means for obtaining second index information from a second information source of the plurality of information sources;

means for displaying a categorized menu on the screen based on the obtained first and second index information; and

means for obtaining necessary information from the first or second information source, in response to selection operation on the menu screen, and for displaying information based on the necessary information,

wherein the menu screen is arranged to display the information in a plurality of dimensions and levels such that a substantial portion of the necessary information can be seen and navigated on a minimum number of screens to enable relatively easy programming decisions and selections.”

(emphasis added)

Therefore, the structure of claim 1, as presented herein, includes means for obtaining first index information from a first information source of the plurality of information sources, wherein the first index information includes representative information indicating scene changes

in the information data provided through the first information source. The index information is used to provide temporal relationships among index images. In a particular implementation, as described in claims 11 and 15, these temporal relationships can be arranged in a spiral layout.

Florin, however, fails to teach or suggest providing means for obtaining first index information from a first information source of the plurality of information sources, wherein the first index information includes representative information indicating scene changes in the information data provided through the first information source. Therefore, Florin fails to teach or suggest all the limitations of claim 1.

Based on the foregoing discussion, claim 1 should be allowable over Florin. Since independent claim 4 closely parallels, and includes substantially similar limitations as, independent claim 1, claim 4 should also be allowable over Florin. Since claims 2-3, 5-8, 9 and 13 depend from one of claims 1 and 4, claims 2-3, 5-8, 9 and 13 should also be allowable over Florin.

Accordingly, it is submitted that the rejection of claims 1-8, 9 and 13 based upon 35 U.S.C. §102(b) has been overcome by the present remarks and withdrawal thereof is respectfully requested.

§ 103 Rejection of Claims 10-12, 14, and 15-17

In Section 2 of the Office Action, the Examiner has rejected claims 10-12, 14, and 15-17 under 35 U.S.C. §103(a) as being unpatentable over Florin in view of Hatori *et al.* (U.S. Patent No. 5,977,974; hereinafter referred to as “Hatori”). This rejection is respectfully traversed below.

Based on the foregoing discussion regarding claims 1 and 4, and since claims 10-12, 14, and 15-17 depend from one of claims 1 and 4, claims 10-12, 14, and 15-17 should be allowable over Florin. Furthermore, it was indicated that “Hatori discloses displaying the plurality of still images in a temporal sequence so that relationships among the plurality of still images can be viewed in time series”.

Therefore, it is submitted that Florin and Hatori, individually or in combination, fail to teach or suggest providing means for obtaining first index information from a first information source of the plurality of information sources, wherein the first index information includes representative information indicating scene changes in the information data provided through the first information source.

Accordingly, it is submitted that the rejection of claims 10-12, 14, and 15-17 based upon 35 U.S.C. §103(a) has been overcome by the present remarks and withdrawal thereof is respectfully requested.

Conclusion

In view of the foregoing, entry of this amendment, and the allowance of this application with claims 1-17 are respectfully solicited.

In regard to the claims amended herein and throughout the prosecution of this application, it is submitted that these claims, as originally presented, are patentably distinct over the prior art of record, and that these claims were in full compliance with the requirements of 35 U.S.C. §112. Changes that have been made to these claims were not made for the purpose of patentability within the meaning of 35 U.S.C. §§101, 102, 103 or 112. Rather, these changes

were made simply for clarification and to round out the scope of protection to which Applicant is entitled.


In the event that additional cooperation in this case may be helpful to complete its prosecution, the Examiner is cordially invited to contact Applicant's representative at the telephone number written below.

The Commissioner is hereby authorized to charge any insufficient fees or credit any overpayment associated with the above-identified application to Deposit Account 50-0320.

Respectfully submitted,

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